

IN THE CLAIMS

Please amend claims 1, 3 and 4 as shown on the following sheets provided in the new format.

Current List of the Claims

1. (Currently Amended) A method of regulating sucrose content in a sugarcane plant comprising up regulating or down regulating the activity of the PFP enzyme in the plant by introducing an untranslatable form of either the PFP gene or a portion of the PFP gene.
2. (Previously Amended) A method according to claim 1 which comprises increasing the sucrose content of the plant by down regulating the activity of the PFP enzyme in the plant.
3. (Currently Amended) A method according to claim 2 1 wherein the activity of the PFP enzyme is down regulated by introducing an untranslatable form of the PFP gene or a portion of the PFP gene or is one selected from the group including:
 - (1) an antisense form of the PFP gene or portion of the PFP gene,
 - (2) an antisense form of the nucleotide sequence as set out in either of SEQ. ID Nos: No. 1,
 - (3) an antisense form of the nucleotide sequence as set out in SEQ. ID or 2, or
 - (4) a nucleotide sequence which is complementary to the nucleotide sequence of SEQ. ID Nos: No. 1, and
 - (5) a nucleotide sequence which is complementary to the nucleotide sequence of SEQ. ID No. or 2.

4. (Currently Amended) A method according to claim 3 wherein the untranslatable form ~~or antisense nucleotide sequence~~ is introduced into the plant using plant expression vector, pUSPc 510 or pASPC 510.

5. (Cancelled)

6. (Previously Amended) An isolated nucleotide sequence comprising:
(i) a nucleotide sequence as set out in either one of Figure 1 (SEQ. ID No: 1) or Figure 2 (SEQ. ID No: 2);
(ii) a nucleotide sequence which is complementary to the nucleotide sequence of (i); or
(iii) a portion of the nucleotide sequence of (i) which is capable of up or down regulating the activity of the PFP enzyme in sugarcane.

7. (Cancelled)

8. (Original) A nucleotide sequence according to claim 6 which is in an antisense orientation.

9. (Previously Amended) A gene construct comprising a promoter and a nucleotide sequence as defined in claim 6 in the sense orientation, the gene construct lacking a translation initiation codon upstream of the nucleotide sequence or possessing an in-frame termination codon directly downstream of the initiating codon.

Claims 10-11 (Cancelled)

12. (Original) A gene construct comprising a promoter and a nucleotide sequence as defined in claim 6 in an antisense orientation.

Claims 13-14 (Cancelled)

15. (Previously Amended) The plant expression vector pUSPc 510 which includes the nucleotide sequence of Figure 1 (SEQ. ID No: 1) or Figure 2 (SEQ. ID No: 2) in a sense orientation, but in an untranslatable form.

16. (Previously Amended) The plant expression vector pASPc 510 which includes the nucleotide sequence of Figure 1 (SEQ. ID No: 1) or Figure 2 (SEQ. ID No: 2) in an antisense orientation.

17. (Previously Amended) A transformed sugarcane plant cell which includes a gene construct according to claim 9.

18. (Previously Amended) A transgenic plant or plant part containing the transformed plant cell of claim 17.

19. (Cancelled)

20. (Previously Amended) A transformed plant cell according to claim 17 which is characterized by a lower level of the PFP_β protein, relative to an untransformed plant.

21. (Previously Amended) A transformed plant or plant part according to claim 18 characterized by a lower level of the PFP_β protein, relative to an untransformed plant.

22. (Previously Amended) A transformed plant cell according to claim 17 characterized by a lower level of PFP activity, relative to an untransformed plant.

23. (Previously Amended) A transgenic plant or plant part according to claim 18 characterized by a lower level of PFP activity, relative to an untransformed plant.

24. (Previously Amended) A transformed plant cell according to claim 17 characterized by a higher level of sucrose, relative to an untransformed plant.

25. (Previously Amended) A transgenic plant or plant part according to claim 18 characterized by a higher level of sucrose, relative to an untransformed plant.

26. (Previously Amended) A method of regulating the level of active PFP in a sugarcane plant cell comprising the step of transforming the plant cell with at least one gene construct according to claim 9.

27. (Previously Amended) A method of increasing the sucrose level in sugarcane plant tissue comprising the step of transforming cells of the plant tissue with at least one gene construct according to claim 9.

28. (Previously Amended) A method of increasing sucrose metabolism in a plant cell of a sugar-storing plant comprising the step of co-transforming the cell with a gene construct according to claim 9.

Claims 29-30 (Cancelled)